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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/988,431	12/11/97	GONG	L 3070-007

020277
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LM02/0825

EXAMINER	
BADERMAN, S	
ART UNIT	PAPER NUMBER
2785	6

DATE MAILED: 08/25/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
08/988,431	Gong
Examiner	**Group Art Unit**
Scott T. Baderman	2785

☒ Responsive to communication(s) filed on *Dec 11, 1997* .

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-23* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-7, 11-17, and 21-23* is/are rejected.

☒ Claim(s) *8-10 and 18-20* is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *5*

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Examiner: Scott T. Baderman

United States Department of Commerce

Patent and Trademark Office

Washington, D.C. 20231

DETAILED ACTION

Claim Objections

1. Claim 11 is objected to because of the following informalities: In line 3, the limitation "the one or more processors" lacks antecedent basis. Appropriate correction is required.

2. Claim 22 is objected to because of the following informalities: In line 4, the limitation "said first routine" lacks antecedent basis. Appropriate correction is required.

Allowable Subject Matter

3. Claims 8-10 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3, 6-7 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Fischer (5,311,591).

As in claims 1 and 21, Fischer discloses a method and system, which includes a processor and a memory coupled to the processor, for providing security wherein the method and system comprise the steps and means for 1) detecting when a request for an action is made by a principal (i.e., detecting when a program requests to perform a function or access a resource) and 2) determining whether the action is authorized based on an association between permissions (i.e., program authorization information) and a plurality of routines in a calling hierarchy associated

with the principal (Figures 3D, 4, 10 and 11, Abstract, column 9: line 17-column 10: line 36, column 15: line 53-column 16: line 8).

As in claims 3 and 22, Fischer discloses the method and system above wherein the calling hierarchy includes a first routine (supervisor routine) (column 15: lines 53-59). Fischer further discloses the step and means for determining whether a permission required to perform the action above is encompassed by at least one permission associated with the first routine (column 15: lines 53-65).

As in claims 6 and 23, Fischer disclose the method and system above. Fischer further discloses the step and means for determining whether a permission required to perform the action above is encompassed by at least one permission associated with each routine in the calling hierarchy (column 10: lines 21-36, column 15: lines 53-65).

As in claim 7, Fischer discloses the method above. Fischer further discloses a method wherein a first routine (supervisor routine) in the calling hierarchy is privileged (column 15: lines 53-59). Fischer further discloses the step of determining whether a permission required to perform the action above is encompassed by at least one permission associated with each routine in the calling hierarchy between and including the first routine and a second routine (i.e., the processing of program 'X') in the calling hierarchy, wherein the second routine is invoked after

the first routine (i.e., once verification is successful), and wherein the second routine performs the requested action (column 15: lines 53-67).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 2, 11-13 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer.

As in claim 2, Fischer discloses the method above. However, Fischer does not clearly disclose a "thread" performing the request for an action nor associating the thread with the determining step taught above. "Official Notice" is taken that "threads" are well known in the art as being a process that is part of a larger process or program.

It would have been obvious to a person skilled in the art at the time the invention was made to include the step of a request being made by a thread and associating the thread with the determining step above into the method taught by Fischer above. This would have been obvious because of the "Official Notice" statement made above and the fact that Fischer clearly teaches

that a "program [requests] to perform a function or access a resource" (Abstract), which would suggest to a person skilled in the art that a "thread", as defined above, could also "request" to perform a function or access a resource like that taught by Fischer above.

As in claims 11-13 and 16-17, Fischer discloses the method in claims 1-3 and 6-7, respectively. However, Fischer does not clearly disclose a computer-readable medium carrying one or more sequences of one or more instructions, wherein the execution of the sequences of the instructions causes processors to perform the methods above. "Official Notice" is taken that it is well known in the art that any computer implemented method, like that taught by Fischer above, can be implemented on a computer-readable medium in the form of sequences of instructions.

It would have been obvious to a person skilled in the art at the time the invention was made to implement the methods taught above on a computer-readable medium in the form of sequences of instructions. This would have been obvious because of the "Official Notice" statement made above.

8.

Claims 4-5 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer in view of Atsatt et al. (5,758,153).

As in claim 4, Fischer discloses the method above. However, Fischer does not clearly disclose a step wherein the association between permissions and the plurality of routines is based on a first association between protection domains and permissions. Atsatt discloses a method for providing security for software entities, which comprise routines or functions, wherein protection domains are used to protect against unauthorized access (Abstract, column 9: lines 39-59).

It would have been obvious to a person skilled in the art at the time the invention was made to include protection domains into the method taught by Fischer above. This would have been obvious because Atsatt clearly teaches that protection domains provide a further level of protection for file system (software) entities (column 9: lines 40-41), which would lead a person skilled in the art to incorporate protection domains into the method taught by Fischer above so that the association between permissions and the plurality of routines is based on a first association between protection domains and permissions.

As in claim 5, Fischer and Atsatt disclose the method above. Atsatt further discloses that the file system (software) entities, which are protected by the protection domains, are objects that comprise routines or functions, and are associated with classes (Abstract, column 1: lines 14-18, column 2: lines 12-17, column 9: lines 39-43), which would mean, based on the teachings in claim 4 above, that the association between permissions and the plurality of routines would also be based on an association between classes and protection domains.

As in claim 14, Fischer and Atsatt disclose the method in claim 4 above. However, Fischer and Atsatt do not clearly disclose a computer-readable medium carrying one or more sequences of one or more instructions, wherein the execution of the sequences of the instructions causes processors to perform the methods above. "Official Notice" is taken that it is well known in the art that any computer implemented method, like that taught by Fischer and Atsatt above, can be implemented on a computer-readable medium in the form of sequences of instructions.

It would have been obvious to a person skilled in the art at the time the invention was made to implement the methods taught above on a computer-readable medium in the form of sequences of instructions. This would have been obvious because of the "Official Notice" statement made above.

As in claim 15, Fischer and Atsatt disclose the method in claims 4, 5 and 14 above.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patents

Wendorf et al. (5,845,129)

Herzberg et al. (5,745,678)

Atkinson et al. (5,892,904)

Mahon et al. (4,809,160)

Deo (5,720,033)

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott T. Baderman whose telephone number is (703) 305-4644.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 305-3718 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

STB

August 19, 1999

ROBERT W. BEAUSOLIEL, JR.
SUPERVISORY PATENT EXAMINER
GROUP 2700